

LEKHT, I.

Work of the Central Laboratory of the "Serp i molot" factory.
Zav.lab. 28 no.11:1391-1392 '62. (MIRA 15:11)
(Steel alloys) (Metallurgical laboratories)

LEKHT, I.

Laboratory for the economics and organization of production. Zav.lab.
29 no.7:884 '63. (MIRA 16:8)
(Moscow--Engineering laboratories)

AUTHOR: Gulyayev, B.B.
TITLE: Conference on Crystallization of Metals (Sovetskaniye po Kristallizatsii Metallov)
PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr. 4, pp 153 - 155 (USSR)

ABSTRACT: This conference was held at the Institut mashinovedeniya AN SSSR (Institute of Mechanical Engineering of the Academy of Sciences of the USSR) on June 28-31, 1958. About 400 people participated and the participants included specialists in the fields of foundry, metallurgy, crystallography, physics, welding, heat, physical chemistry, mathematical physics and other related subjects. In addition to Soviet participants, foreign visitors included Professor D. Cziki (East Germany) and Professor G. G. Korotkiy (Czechoslovakia). This conference on crystallization of metals and alloys and its influence relating to the general problem of the theory of foundry processes.

Crystallization of Non-ferrous Metals. N.D. Belousov and A.A. Gerasimov - in their paper investigation of the crystallization and the properties of non-ferrous metals (Aluminum, Magnesium, Zinc, Cadmium, Lead, Tin, etc.) as a function of the conditions of casting. Presented results of experiments on crystallizing castings with crystallization under pressure from all sides and piston pressure within a wide range of specific loads. The results of the investigation provide material for improving existing methods of applying pressure to influence the crystallization of alloys. The influence of the conditions of crystallization on the casting and mechanical properties of aluminum alloys, at normal and at elevated temperatures, were discussed in the papers of I.F. Kolobnev and A.Ye. Gerasimov. The results of investigations of the conditions of crystallization of aluminum alloys during casting were presented in the paper of V.G. Bedykh. The results of investigations of the conditions of casting of non-ferrous alloys (Aluminum, Magnesium, Zinc, Cadmium, Lead, Tin, etc.) were presented in the paper of V.G. Bedykh. The results of investigations of the conditions of casting of non-ferrous alloys (Aluminum, Magnesium, Zinc, Cadmium, Lead, Tin, etc.) were presented in the paper of V.G. Bedykh.

Crystallization of Metals in an Ultrasonic Field. The following papers were read: Member of the Academy of Sciences of the USSR N.N. Sirota, Ye.L. Lehtinen and M. A. Gerasimov - "Crystallization of Metals and Alloys in an Ultrasonic Field"; G.L. Petkov - "Crystallization and Chemical Homogeneity in Weld Joints"; M.Kh. Shorshorov and V.G. Bedykh - "Influence of Non-uniformity of Crystallization in the Weld Bath on the Formation of Hot Cracks".

Crystallization of Metals in an Ultrasonic Field. The following papers were read: Member of the Academy of Sciences of the USSR N.N. Sirota, Ye.L. Lehtinen and M. A. Gerasimov - "Crystallization of Metals and Alloys in an Ultrasonic Field"; G.L. Petkov - "Crystallization and Chemical Homogeneity in Weld Joints"; M.Kh. Shorshorov and V.G. Bedykh - "Influence of Non-uniformity of Crystallization in the Weld Bath on the Formation of Hot Cracks".

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SOV/126-7-6-12/24

AUTHORS: Sirota, N.N., Lekhtblau, Ye.A. and Smolyarenko, E.M.

TITLE: Influence of Ultrasonic Action in the Crystallization Process on the Structure and Properties of Aluminium Silicon Alloys

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 7, Nr 6, pp 879-884 (USSR)

ABSTRACT: Experiments were carried out on the ultrasonic apparatus of the Scientific Research Technological Institute (Fig 1). It consisted of a generator, a 3 kW amplifier and a magnetostriction transformer and rectifier. Twelve Al-Si alloys were made for the experiments with the following silicon contents: 2.5; 5; 7.5; 10; 11; 11.6; 12; 12.5; 15; 17.5; 20 wt.%. The alloys were heated to 250°C above the melting point and were cast into a mould which had been pre-heated to 400°C and dressed with chalk. Control runs have shown that dressing with chalk has no influence on the crystallization process and the structure of the ingot but it does prevent sticking to the mould walls. Ultrasonic waves were applied up to the point of casting. The frequency of oscillation was 18 to 18.5 khertz, Card 1/4 changing during the crystallization process due to an

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Influence of Ultrasonic Action in the Crystallization Process on the Structure and Properties of Aluminium Silicon Alloys

increase in the quantity of the solid phase and to the change in the acoustic parameters of the system. The power supply to the emitter was 1.0 to 1.5 kW. As the alloys changed to the heterogeneous pasty state at the end of the crystallization process, the ultrasonic waves were as a rule discontinued. After perfecting the method a series of experiments with alloys of the Al-Si system was carried out. Six ingots were cast from each alloy, three being exposed to ultrasonic waves and three for reference purposes. From these ingots, specimens were made for tensile, impact and hardness testing and also for macro and micro-sections. It was noticed that alloys with low Si content (up to 7.5%) did not swell up under the action of ultrasonic waves until the ingot had completely solidified. The surface of the exposed ingots was smooth and even, whereas the surface of the reference specimens was rough. In Fig 2 the macrostructure of an Al-Si alloy containing 2.5% Si is shown (a - non-exposed and b - exposed specimens). In Fig 3 the macrostructure

Card 2/4 of an Al-Si alloy containing 11.6% Si is shown (a - non-

SOV/126-7-6-12/24

Influence of Ultrasonic Action in the Crystallization Process on the Structure and Properties of Aluminium Silicon Alloys

exposed and b - exposed specimens). In Fig 4 the macrostructure of an Al-Si alloy containing 15% Si is shown (a - non-exposed and b - exposed specimens). In Fig 5 the influence of exposure on the change in ultimate tensile stress of Al-Si alloys with change in composition is shown (exposed specimen - upper curve). In Fig 6 the change in impact strength of Al-Si alloys with change in composition is shown (exposed specimen - upper curve, non-exposed specimen - lower curve). The authors arrive at the following conclusions:

- 1) As a result of the action of ultrasonic waves on the crystallization of Al-Si alloys, within the range 2.5 and 20% Si, a sharp refinement of the primary grain and microstructure takes place.
- 2) The ultimate tensile stress of exposed ingots increases on the average by 11% and the percentage elongation by 75%.
- 3) A general increase in hardness and impact strength

Card 3/4 of the alloys is achieved.

SOV/126-7-6-12/24
Influence of Ultrasonic Action in the Crystallization Process on
the Structure and Properties of Aluminium Silicon Alloys

There are 6 figures, 1 table and 3 references, 1 of
which is Soviet and 2 German.

ASSOCIATION: Moskovskiy institut tsvetnykh metallov i zolota imeni
M. I. Kalinina (Moscow Institute of Non-ferrous Metals
and Gold imeni M. I. Kalinin)

SUBMITTED: December 7, 1957 (Initially)
July 29, 1958 (After revision)

Card 4/4

PLAN I BOOK EXTRODUCTION SOV/1944

Sovetskoye po teorii lit'ya prof. 1944

Extinction of metal alloys (Crystallization of Metals):
 Translations of the Fourth Conference on the Theory of Casting Processes
 Moscow, Izdatvo M SSSR, 1960. 355 p. 3,200 copies printed.

Spetsialnaya Agenciya Akademiya Nauk SSSR. Institut metallofiziki. Leningrad po
 metallofiziki.

Prof. M. I. B. Oshchepkov, Doctor of Technical Sciences, Professor of
 Metallurgy, Moscow V. I. Leninovskiy Inst. of Metals.

PREFACE: This book is intended for metallurgists and scientific workers. It
 may also be useful to technical personnel at foundries.

CONTENTS: The book contains the transactions of the Fourth Conference (1959) on
 the Theory of Casting Processes. (The previous 3 conferences dealt with
 hydrodynamics of molten metals (1955), solidification of metals (1956), and
 casting processes in castings (1957)). General problems in the crystal-
 lization of metals, including the crystallization of constructional steels,
 alloy steels with special properties, cast iron, and of nonferrous alloys, are
 discussed. Attention is also given to the work of Oshchepkov and B. V. Oshchepkov and their
 students, B. B. Oshchepkov and A. G. Oshchepkov, in the theory of crystallization
 of ferrous and nonferrous metals and alloys. Investigations of the mechanism of
 also mentioned in connection with his work on the planning of research on
 crystal formation. References accompany several of the articles.

III. CRYSTALLIZATION OF SPECIAL-PROPERTY
STEELS AND ALLOYS

Gorbenko, I. I. Influence of Modification on the Structure and
 Mechanical Properties of High-Alloy Steels 158

Alexander, J. J., B. P. Lashin, and Ye. M. Rodina. Structure Formation
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Shiba, I. I., and A. A. Krasnaya. Effect of Ultrasonic Vibrations
 on Metal Solid Crystallization in a Molten Metal 176

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Boris, E. P., and Ye. M. Rodina. Structure Crystallization of Gray Iron 180

Chernov, I. I. Graphite Crystallization in Iron-Cast Iron Alloys 192

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 Iron and Steels 209

Shiba, I. I. Silicon Liquidation in Iron-Carbon-Silicon Alloys and
 the Structure of Cast Iron 220

Lav, I. I. Influence of the Cooling Rate During Crystallization on
 the Distribution of Alloying Elements Between Phases in White Cast
 Iron 231

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Shiba, I. I., and A. A. Krasnaya. Crystallization of Magnesium
 Cast Iron (with 15 to 16 figs) 251

Shiba, I. I. On the Modification of Malleable Cast Iron With
 Manganese and Boron 262

V. CRYSTALLIZATION OF NONFERROUS ALLOYS

Shiba, I. I., Ye. M. Rodina, and E. M. Rodina. Crystallization
 of Alloys in an Ultrasonic Field 268

Dzhalilov, A. O. Factors Influencing the Structure of a Casting
 Alloy Casted Under Pressure 272

Shiba, I. I., and A. A. Krasnaya. Crystallization of Nonferrous-
 Alloy Castings Under Pressure 279

Verbitskiy, E. I., and E. M. Rodina. Influence of Pressure During
 Crystallization on the Change in Mechanical Properties of Al₂ and Al₃ Alloys 286

Shiba, I. I., Ye. M. Rodina, and V. S. Krasnaya. Character-
 istic Features of the Crystallization and Structure of Copper Alloys
 Obtained by the Electrolytic-Method (with 10 figs) 294

Shiba, I. I. On the Crystallization of Copper Alloys
 Obtained by Diffusion Alloying in Special Media 303

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 Obtained by Diffusion Alloying in Special Media 314

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D201/306

AUTHORS: Sirota, N.N., Lekhtblau, Ye.A. and Smolyarenko, E.M.

TITLE: Crystallization of alloys in an ultrasonic field

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 3, 1961, 20, abstract 3 E144 (V sb. Kristallizatsiya metallov, M., AN SSSR, 1960, 268-271)

TEXT: An investigation has been made into the effect of ultrasonic oscillations at a frequency of 19 Kc/s on the process of crystallization. The alloys Al-Si, Al-Cu, Al-Mg were heated to about 50-100°C above their melting point and then poured into a casting mould heated to 400°C. The mould was then screwed onto the concentrator. The analysis of the samples thus obtained has shown that the sedimentation shell concentrated in the upper portion of the ingot under the effect of ultrasound and was evenly distributed throughout its volume without ultrasound. By comparing the macrographs it was determined that sound makes the structure of the ingot

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LEKHTER, A. M.

Jun 53

USSR/Medicine - Brucellosis

"Experience in Preventive Inoculation With Live Brucellosis Vaccine," A. M. Lekhter,
Antibrucellosis Sta, Tomsk Oblast Health Dept

Zhur Mikro, Epid, i Immun. No 6, pp 23-24

Acc to instructions of the Ministry of Health RSFSR, preventive inoculation against brucellosis was carried out on personnel of a meat combine where the incidence of infection with this disease had been 15-20%. The inoculations were successful, as shown by immunological tests and by the absence of infections after inoculation.

267T12

LEKHTER, A. M.: Master Med Sci (diss) -- "The epidemiology of brucellosis in Tomsk Oblast and methods to liquidate it". Tomsk, 1958. 11 pp (Tomsk State Med Inst, Chair of the Organization of Health Measures and the History of Medicine, Chair of Microbiology), 200 copies (KL, No 2, 1959, 125)

AKHMETOVA, R.S.; TORBEYEVA, D.R.; NEDOGREY, P.M.; LEKHTER, V.I.; FROLOV, A.P.

Improving the quality of highway asphalts obtained from
deasphaltization products. Khim.i tekhn.topl.i masel 8 no.2:20-23
F '63. (MIRA 16:10)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke
nefti, Ufimskiy neftepererabatyvayushchiy zavod im. XXII s"yezda
Kommunisticheskoy partii Sovetskogo Soyuza.

LEKHTIK, A.

Rapid method of laying open-hearth furnace checkerwork.
Metallurg 7 no.8:18 Ag '62 (MIRA 15:9)
(Open-hearth furnaces--Design and construction)

LEKHTIK, A.M.

Cleaning the regenerator checkers of open-hearth furnaces in
foreign plants [from foreign journals]. Stal' 22 no.2:126-127
F '62. (MIRA 15:2)
(United States---Open-hearth furnaces)

LEKHTIK, A.

Ramming open-hearth furnace walls with refractory lining. Metallurg
7 no.3:19-21 Mr '62. (MIRA 15:2)
(Open-hearth furnaces--Maintenance and repair)

LEKHTIK, A.

Vacuum dust removal from open-hearth furnace exit-flues.

Metallurg 8 no.1:21 Ja '63.

(MIRA 16:1)

(United States--Open-hearth furnaces--Maintenance and repair)

(Dust-removal)

LEKHTIK, A.

Laying the brickwork of open-hearth and electric steel smelting
furnaces of dolomite blocks. Metallurg 8 no.10:19-20 0 '63.
(MIRA 15:12)

LEKHTIK, A.

Hydro-blasting for the breaking-up of discarded ingot molds. Metallurg
7 no.12:17 p '62. (MIRA 15:12)

(Scrap metals)

LEKHTIK, A.M.

Useful book for open-hearth furnace operators. ("Slag
removal from open-hearth furnace slag pockets" by E.G. Galaton.
Reviewed by A.M. Lekhtik). Metallurg 6 no. 1:20 Ja '61.
(MIRA 14:1)

(Open-hearth furnaces)

LEKHTIK, A.

Dust removal from under regenerator checkers with the help of the
gas purification flue [from foreign practices]. Metallurg 7 no.1:
26 Ja '62. (MIRA 15:1)

(United States--Open-hearth furnaces)

LEKHTIK, A.

Open-hearth furnace hearth bottom made of carbon blocks.
Metallurg 9 no.5:26 My '64. (MIRA 17:8)

LEKHTIK, A.M., inzh.

Oxygen-powder cutting in construction work. Mekh. stroi. 21
no.1:25-26 Ja '64. (MIRA 17:4)

SENEBRYAKOVA, N.N., kand.med.nauk; KARAL'NIK, K.D.; LEKHNIK, L.M.

Diagnosis and clinical aspects of congenital heart defects in
children. Vop.okh.mat.i det. 5 no.4:20-23 31-Ag '60. (MIRA 13:7)

1. Iz kafedry gospi'tal'noy pediatrii Sverdlovskogo meditsinskogo
instituta.

(HEART--ABNORMALITIES AND DEFORMITIES)

LEKHTIMYAKI, E.V.

Method for hydrogeological investigation of peat bogs in terminal
and ground moraine relief. Izv.vys.ucheb.zav.; geol.i razv. 1
no.9:118-124 S '58. (MIRA 12:9)

1. Leningradskiy gornyy institut.
(Peat bogs) (Water, Underground)

LEKHTIMYAKI, E.V.

Adoption of hygroscopic holes for drainage purposes in the
Tikhvin bauxite deposits. Izv. vys. ucheb. zav.; geol. i razv.
2 no.12:119-127 '59. (MIRA 14:6)

1. Leningradskiy gosudarstvennyy universitet.
(Tikhvin region--Bauxite) (Mine drainage)

LEKHTIMYAKI, E.V. [Lehtimäki, E.V.]

Hydrogeological mining conditions in the Tikhvin deposits. Izv.
vys. ucheb. zav.; geol. i razv. 3 no.8:72-79 Ag '60. (MIRA 13:10)

1. Leningradskiy gornyy institut.
(Tikhvin Region---Bauxite)

LEKHTIMYAKI, E. V.

Cand Geol-Min Sci - (diss) "Hydrogeology of the Tikhbinskiye bauxite deposits, and problems of draining them." Leningrad, 1961. 26 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Geological Survey Inst imeni S. Ordzhonikidze); 200 copies; price not given; (XL, 6-61 sup, 203)

LEKHTIMYAKI, E.V.

Adoption of a method of electrohydrodynamic analogy for determining the water inflow to strip mines in the Tikhvin bauxite deposit. Izv. vys. ucheb. zav.; geol. i razv. 4 no.3: 82-101 Mr '61. (MIRA 14:6)

1. Leningradskiy gornyy institut imeni G.V. Plekhanova.
(Tikhvin--Bauxite) (Mine water)

LEKHTIMYAKI, E.V.; CHEREMNYKH, M.G.

Device for measurement the amount of water absorbed by absorption wells. Izv.vys.ucheb.zav.; geol. i razv. 5 no.5:109-115 My '62.
(MIRA 15:6)

1. Leningradskiy gornyy institut imeni G.V. Plekhanova.
(Mine drainage)

NOVOZHILOV, V.N.; LEKHTIMYAKI, E.V.

Trend in draining bauxite deposits in Tikhvin District. Zap.

LGI 44 no.2:109-117 '62.

(MIRA 16:3)

(Tikhvin District--Mine drainage) (Tikhvin District--Bauxite)

LEKHTIMYAKI, E.V.

Effect of hydrogeological conditions of the Starobin potassium salt deposit on the selection of the system for developing the Soligorsk mines. Dokl. AN BSSR 9 no. 4:240-242 Ap '65
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut galurgii.
Submitted April 7, 1964.

LEKHTINEN, G. N.

57-6-11/16

AUTHOR
TITLE

LEKHTINEN, G.N., RZAYEV, M.A., STIL'BANS, L.S.
Investigation of the Temperature Dependence of Work Function of Some
Semimetals

PERIODICAL

(Issledovaniye temperaturnoy zavisimosti raboty vykhoda nekotorykh polu-
metallov. Russian)

ABSTRACT

Zhurnal Tekhn.Fiz. 1957, Vol 27, Nr 6, pp 1221 - 1228 (U.S.S.R.)

The authors tried to compare the space- and surface characteristics of semiconductors. For this purpose the dependence of the potential-difference in relation to the metal, the e.m.f. and the electric conductivity on the temperature were measured by means of one and the same sample of the material to be investigated. The carrier concentration was determined at room temperature. The measurements were carried out by means of polycrystal samples with an electron conductivity as well as with samples with a hole conductivity. The investigations showed satisfactory coincidence of the dependence of the work function, the e.m.f. and the electric conductivity on the temperature with the theoretically computed level of the chemical potential $\frac{d\mu}{dT}$ at 150 + 400 ° C. The density

of the surface conditions and of the surface charges for screening off the space characteristics of the semiconductors (in the case of a carrier concentration of $10^{18} + 10^{19} \text{ cm}^{-3}$) can be assumed as not being sufficient at these temperatures. The density of the surface charge increases,

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57-6-11/26

Investigation of the Temperature Dependence of Work Function of Some Semimetals

however, abruptly at a temperature of less than 150 ° C on account of the absorption of the residual gases. The dependence of the bottom of the free zone $\frac{d\mu}{dT}$ on the temperature was neglected in the case of the

theoretical calculation of $\frac{dE_o}{dT}$. The coincidence between theory and experiment proves that $\frac{dE_o}{dT} \sim 10^{-4}$ mV/degree or smaller. In the end

the width of the band pass is determined. (With 13 illustrations, 1 table and 5 Slavic references).

ASSOCIATION

Institute for Semiconductors of the Academy of Science of the U.S.S.R.
Leningrad
(Institut poluprovodnikov AN SSSR, Leningrad)

PRESENTED BY
SUBMITTED
AVAILABLE

8.1.1957
Library of Congress

Card 2/2

SOV/84-58-7-29/46

AUTHOR: Lekhtman, I., Malkov, S.

TITLE: Improving Work Conditions (Usloviya truda uluchsheny)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 7, pp 33-34 (USSR)

ABSTRACT: The article reports on innovations introduced in the instrument department of an aircraft repair establishment directed by Shakhov, for improving the work conditions and the safety of workers. Work benches equipped with ventilation, instrument and parts cabinets of special design are described. The precautions taken in the special room for applying luminescent coatings to instrument scales are described in considerable detail. The authors urge the same safety measures for other establishments maintaining a special instrument shop. Three photographs accompany the text.

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LEKHTMAN, I.V. (Leningrad)

Interpretation of some problems relating to neural regulation
[with summary in English]. Vop. psikhol. 4 no.5:117-132 S-O '58.
(MIRA 11:12)

(Psychology, Physiological)

LEKHMAN, I. Ya., Engr.

Cand. Tech. Sci.

Dissertation: "Fundamentals of the Design of Magnetic Amplifiers." Moscow Order of Lenin Aviation Inst imeni Serge Ordzhonikidze, 23 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

LEKHMAN, I. Ya.

"Loaded characteristics of low-power induction two -phase ~~mot~~ors,"
Avtomat. i Telemekh., 19, No 1, 1949

Aviation Inst. S. . Ordzhonidze

Pa. 150T36

LEKHTMAN, I., YA.,

USSR/Engineering - Servomechanisms Oct 49

"The Problem of Inertia in DC Servomotors With Independent Excitation," I. Ya. Lekhtman, Cand. Tech Sci, Moscow Avn Inst, 5 pp

"Elektrichestvo" No 10

Derived generalized expressions for electro-mechanical and electromagnetic time constants of a DC servomotor with independent excitation. Showed that electromechanical time constant does not depend upon dimensions of a series of geometrically similar machines. Electromagnetic time constant is highly dependent upon the

150T36
USSR/Engineering - Servomechanisms (Contd) Oct 49

size and is directly proportional to the cube of the armature diameter and inversely proportional to the size of the air gap and the number of pole pairs.

150T36

LEKHTMAN, I. YA.

178T34

FOR TECHNICAL RUBRIC

USSR/Electricity - Telephony
Electromagnets

Dec 50

"Calculating DC Electromagnets," I. Ya. Lekhtman,
Cand Tech Sci, Moscow

"Elektrichestvo" No 12, pp 66-68

Suggests, for use in designing telephone equip-
ment, simplified formula to det approx power
drawn by dc electromagnet winding for given force,
displacement, and duration of operation. Sub-
mitted 7 Mar 49.

178T34

PA 187T33

USSR/Mathematics - Follower Systems, Jan/Feb 51
Servomechanisms

"Calculation of Relay Follower Systems," I. Ya.
Lekhtman

"Avtomat i Telemekh" Vol XII, No 1, pp 15-27

Expounds simplified methods for computing relay follower system taking into account the time constant of the motor and amplifier, time delay of the relay, and width of zone of insensitivity. Bases computations on method of harmonic balance, proposed by I. S. Gol'dfarb. Obtains simple computational

187T33

USSR/Mathematics - Follower Systems, Jan/Feb 51
Servomechanisms
(Contd)

formulas which agree with the exact soln of the problem. First submitted 10 Sep 48; resubmitted 20 May 50 after revisions.

187T33

LEKHTMAN, I. YA.

GINSBURG, S.A.; LEKHMAN, I.Ya.; MALOV, V.S.

[Fundamentals of automatic and remote control] Osnovy avtomatiki i telemekha-
niki. Moskva, Gos.energ.isd-vo, 1953. 432 p. (MLRA 6:12)
(Automatic control) (Remote control)

USSR/Automatics and telemechanics-magnetic circuits

FD-2760

Card 1/2

Pub. 10 - 5/11

Author : Lekhtman, I. Ya. (Moscow)

Title : Graphico-analytical method for calculating the characteristics of magnetic circuits in the case of the joint action of constant and variable fields. I

Periodical : Avtom. i telem., 16, Sep-Oct 1955, 467-475

Abstract : The author expounds a graphico-analytical method for calculating the characteristics of magnetic circuits in the case of the joint action of constant and variable fields. The construction of the characteristics is conducted on the basis of an original curve of magnetization of the material without its approximation. He shows that the characteristics are obtained differently for series and parallel connection of alternating-current windings. He concludes that the proposed graphico-analytical method permits one to construct for each magnetic material two universal families of characteristics that give the possibility of determining the connection between the instantaneous values of current and emf in windings of typical coupled magnetic system with general under-magnetization. For the construction of the characteristics it is necessary to know only the original curve of magnetization of the

FD-2760

Card 2/2

material. One family of characteristics relate to the circuit scheme with series connection of a-c windings and the other family refers to the circuit with parallel connection. The author shows that the characteristics of these circuits in the general case are different.

Institution : -

Submitted : August 24, 1953

LEKHTMAN I. Ya. (Moskva)

Graphic analysis technique for calculating the characteristics of magnetic circuits operated under the simultaneous influence of direct and alternating fields. Avtom. i telemekh. no. 3:264-273 Mr '56. (Magnetic amplifiers) (MLRA 9:7)

LEKHTMAN, I. Ya.

AUTHOR: Sergeyev, A. S., Docent 105-58-4-29/37

TITLE: Dissertations (Dissertatsii)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 88-89 (USSR)

ABSTRACT: For the Degree of Candidate of Technical Sciences, 1947-1954.
At the Moscow Technical College imeni Bauman
 (Vysshneye tekhnicheskoye uchilishche imeni Bauman).
A. I. Guzenko, on March 1953: "The Method of Analysis and the Synthesis of the Type of Feedback-Circuits of a Power Servosystem". Official opponents were: Doctor of Technical Sciences Professor N. V. Gorokhov and Candidate of Technical Sciences G. M. Ulanov.
G. D. Shevchenko, on May 25, 1953: "The Effect of the Aluminum Additions on the Quality and the Capacity of Manual Arc Welding of Low-Carbon Steels". Official opponents were: Doctor of Technical Sciences Professor G. I. Pogodin-Alekseyev and Candidate of Technical Sciences Docent A. A. Yerokhin.
At the Moscow Institute for Aviation imeni Ordzhonikidze
 (Moskovskiy aviatsionnyy institut im. Ordzhonikidze).

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Dissertations

105-58-4-29/37

I. Ya. Lekhtman, on April 28, 1947: "Foundations for the Design of Magnetic Amplifiers". Official opponents were: Doctor of Technical Sciences Professor E. A. Meyerovich and Professor G. M. Zhdanov.

A. Ye. Budarov, on June 30, 1947: "Investigation of Some Types of Impulse-Voltmeters and Wattmeters Within the Range of Meterwaves and in the Case of D. C. I, pulses". Official opponents were: Professor I. S. Dzhigit and Candidate of Technical Sciences V. N. Gorshunov.

At the Moscow Mining Institute imeni Stalin (Moskovskiy gornyy institut im. Stalina).

G. Ye. Ivanchenko, on April 17, 1947: "Automation of Mine Conveying by an Asynchronous Motor Drive". Official opponents were: Doctor of Technical Sciences Professor D. P. Morozov and Candidate of Technical Sciences V. S. Kravchenko.

V. G. Shorin, on October 30, 1952: "Some Problems in the Investigation of the Operation of Mine Electrolocomotives". Official opponents were: Doctor of Technical Sciences S. A. Volotkovskiy and Candidate of Technical Sciences Docent S. M. Lomakin.

Card 2/3

Dissertations

105-58-4-25/37

P. V. Koval', on May 27, 1954: "Some Problems in Using Electromagnetic Drives in Dynamic Coal Undercutting".

Official opponents were: Doctor of Technical Sciences Professor A. V. Dokukin and Candidate of Technical Sciences Docent V. G. Savast'ev.

At the Moscow Institute for Mechanics (Moskovskiy mekhanicheskiy institut).

Ye. V. Filipchuk, on June 30, 1953: "Graphical Analytical Method for the Investigation of a Relay Sewosystem". Official opponents were: Doctor of Technical Sciences Professor A. S. Shatalov and Candidate of Technical Sciences Docent V. V. Petrov.

AVAILABLE: Library of Congress

1. Electrical engineering-Reports

Card 3/3

28(1) LEKHTMAN, I. Ya.
PHASE I BOOK EXPLOITATION SOV/3244

Ginzburg, Samuil Aleksandrovich, Izrail' Yakovlevich Lekhtman, and
Vladimir Sergeyevich Malov

Osnovy avtomatiki i telemekhaniki (Fundamentals of Automation and
Telemechanics) 2d ed., rev. Moscow, Gosenergoizdat, 1959. 478 ..
35,000 copies printed.

Ed. (Title page): S. A. Ginzburg; Ed. (Inside book):
Yu. P. Ustinova; Tech. Ed.: G. Ye. Larionov.

PURPOSE: The book is intended for engineers and technicians working
in automation and remote control or interested in familiarizing
themselves with this field. It may also be used as a textbook by
students.

COVERAGE: The book contains basic information on automation and
remote control facilities. It describes electronic, semiconductor
and other components, such as data units, relays, amplifiers,
distributors, voltage regulators, servomotors and others. The
authors examine automatic regulation and control, servos, and
measuring and computing systems. They describe the operation of
Card 1/9

Fundamentals of Automation (Cont.)

SOV/3244

telemetering and remote control systems and the function of communication channels. The Introduction and Chapters 1, 2, 5 and 11 were written by S. A. Ginzburg, Chapters 3, 7, 8 and 9 by I. Ya. Lekhtman, Chapters 12, 13, 14, 15 and 16 by V. S. Malov. Chapter 4 was written jointly by S. A. Ginzburg and I. Ya. Lekhtman, and Chapters 6 and 10 by S. A. Ginzburg and V. S. Malov. There are 38 references, all Soviet.

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3-16-60

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Pg-4/Pk-4/Pl-4/Pn-4/Po-4/Pq-4/Pac-4/Pae-2 IJP(c) BG

ACCESSION NR AM5012951

BOOK EXPLOITATION

UR/72
211

Ginzburg, Samuil Aleksandrovich; Lekhtman, Izrail' Yakovlevich; Malov, Vladimir
Sergeyevich

Principles of automatic control and remote control (Osnovy avtomatiki i telemekhaniki) 3d ed., rev. Moscow, Izd-vo "Energiya", 65 0511 p. illus., biblio., index. 43,000 copies printed

TOPIC TAGS: telemetry equipment, automation, electronic signal, electronic equipment, telemetry transmitter, automatic control, remote control, servosystem

PURPOSE AND COVERAGE: The book contains fundamental data on automation and remote control facilities. Electronic, semiconductor and other units such as transmitters, relays, amplifiers, distributors, regulators, slave motors etc. are described. Automatic control, servo, measuring and computing systems are discussed. Telemetry and remote control systems are described. The book is intended for broad sections of engineers and technicians working in the field of automatic control and telemechanics or desirous of becoming acquainted with this field and may likewise serve as a student textbook.

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OTHER: 000

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GINZBURG, Semail Aleksandrovich; LEKHTMAN, Izrail' Yakovlevich;
MAYLOV, Vladimir Sergeyevich; SMIRNOV, A.D., red.

[Principles of automatic and remote control] Osnovy av-
tomatiki i telemekhaniki. Izd.3., perer. Moskva, Ener-
giia, 1965. 511 p. (MIRA 18:6)

LEKHTMAN, M.N.

LEKHTMAN, M.N., prof. MIRINA, A.F.

Use of radon waters in gynecological diseases at Dzhety-Oguz.
Akush. i gin. 32 no.5:57-59 S-O '56. (MIRA 10:11)

1. Iz kafedry akuusherstva i ginekologii (zav. - prof. M.N.Lekhtman)
Kirgizskogo meditsinskogo instituta i kurorta Dzhety-Oguz.

(GYNECOLOGICAL DISEASES, ther.

radon water)

(BALNEOLOGY, in various dis.

radon water in gyn. dis.)

(RADIUM, ther. use

same)

LEKHTMAN, Ya.B.; PECHATNIKOV, Yu.S.

Interaction of the signal systems during simultaneous muscular and mental work. Vop.psikhol. 2 no.2:51-63 Mr-Apr '56. (MLBA 9:8)

1. Kafedra fiziologii Krasnoznamennogo Voennoy instituta fizicheskoy kul'tury i sporta imeni V.I. Lenina, Leningrad.

(Nervous system)

(Movement, Psychology of)

(Conditioned response)

LAKHTMAN, Ya.B.

~~Analysis of the mechanism of the adaptation-trophic effect of the~~
sympathetic nervous system on the skeletal muscles. *Fiziol.zhur.*
42 no.9:779-787 S '56. (MLRA 9:11)

(MUSCLES, physiology,

sympathetic regulation, eff. of neostigmine (Rus))

(SYMPATHETIC NERVOUS SYSTEM, physiology,

musc. funct. regulation, eff. of neostigmine (Rus))

(NEOSTIGMINE, effects,

on sympathetic regulation of musc. (Rus))

LEKHTMAN, Ya.B.

More about combined muscular and mental work. Vop.psikhol.3
no.1:152-156 Ja-F '57. (MIRA 10:3)

1. Krasnoznamenny voyenny institut fizicheskoy kul'tury i sporta
imeni V.I. Lenina, Leningrad.
(Movement, Psychology of) (Thought and thinking)

DOBROVOL'SKIY, Viktor Konstantinovich, prof.; LEBEDEVA, V.S., kand.med.
nauk, starshiy nauchnyy sotrudnik; UL'RIKH, Ye.S., kand.biolog.
nauk, starshiy nauchnyy sotrudnik; YAGUNOV, S.A., prof., doktor
med.nauk [deceased]; STARTSEVA, L.I., kand.med.nauk, starshiy
nauchnyy sotrudnik; LEKHTMAN, Ya.B., red.; KHARASH, G.A., tekhn.red.

[Therapeutic physical culture] Lechebnaya fizicheskaya kul'tura.
Leningrad, Gos.izd-vo med.lit-ry Medgiz, Leningr.otd-nie, 1960.
349 p. (MIRA 13:7)

1. Chlen-korrespondent Akademii meditsinskikh nauk (for Yagunov).
(EXERCISE THERAPY)

DOBROVOL'SKIY, Viktor Konstantinovich, prof.; EGOLINSKIY, Ya.A.,
prof.; LEBEDEVA, V.S., dots.; BUKALOV, M.M., vrach;
LEKHTMAN, Ya.B., red.; LEBEDEVA, Z.V., tekhn. red.

[Medical and pedagogical control of physical education in
boarding schools] Vrashebno-pedagogicheskii kontrol' za fi-
zicheskim vospitaniem v shkolakh-internatakh; posobie dlia
vrachei. Leningrad, Medgiz, 1963. 183 p. (MIRA 16:7)
(PHYSICAL EDUCATION FOR CHILDREN)

KNYAZEV, S., inzh.; LEKHTSIYER, A., inzh.

New means for increasing freight traffic. Rech. transp. 20
no. 2:30-31 F '61. (MIRA 14:2)
(Tank vessels)

LEKHTSIYER, I. R.

185T27

USSR/Engineering - Welding, Equipment Feb 51

"Device for Measuring Stressès Between the Elec-
trodes of Spot and Roller Welding Machines,"
I..R..Lekhtsiyer, Engr

"Avtogen Delo" No 2, p 29

Quality of welding depends to considerable
extent on properly selected pressure imposed on
electrodes. Simple device was constructed to
det force required for removal of stress between
electrodes. Emphasizes importance of detn for
adjustment of resistance-welding machs.

185T27

LEKHTSIYER, I. R.

25(1)

PHASE I BOOK EXPLOITATION

SOV/2901

Kulikov, Fedor Vasil'yevich, and Il'ya Romanovich Lekhtsiyer

- Osnovnyye metody myagkoy i tverdoy payki (Basic Methods of Soldering and Brazing) Moscow, Trudrezervizdat, 1958. 127 p. 15,000 copies printed. (Series: Biblioteka molodogo rabochego)

Scientific Ed.: I.I. Il'yevskiy; Ed.: T.I. Rychek; Tech. Ed.: Yu.N. Gorokhov.

PURPOSE: This booklet is intended for junior specialists of labor-reserve schools working in soldering. It may also be useful to foremen and instructors.

COVERAGE: This booklet contains information on the compositions and properties of solders and fluxes used in industry. General problems of soldering and brazing and the equipment commonly used in the processes are discussed. No personalities are mentioned. There are 15 references, all Soviet.

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LEKHTSIYER, I. R.

PHASE I BOOK EXPLOITATION SOV/3720

Kulikov, Fedor Vasil'yevich, and Il'ya Romanovich Lekhtsiyer

Tverdaya payka (Brazing) Moscow, Gosenergoizdat, 1959. 175 p. 10,000 copies printed.

Ed.: M.M. Zil'bersheyd; Tech. Ed.: N.I. Borunov.

PURPOSE: This book is intended for technologists, assemblers, designers, and other workers in electrical-engineering plants and planning organizations.

COVERAGE: The book deals with the physical nature of brazing processes and the chemical compositions and physical and mechanical properties of brazing materials and fluxes. Descriptions of brazing methods and equipment are presented. No personalities are mentioned. There are 47 references: 42 Soviet and 5 English.

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Brazing

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ZAYTSEV, I.F.; VDOVIN, D.I.; GNEDOV, N.P.; BLAGOV, I.S.; ZIMASKOV, V.A.;
KOTKIN, A.M.; LEKHTSIYER, I.S.; MIROSHNIKOV, V.G.; OSYKIN, V.T.

Separator for dressing lump material. Gor. zhur no.4:76 Ap '63.
(MIRA 16:4)

(Separators (Machines))

RAPOPORT, B. I.; LEKHTSIYER, L. I.; SUSLINA, N. S.

X-Rays - Therapeutic use

X-ray therapy of glossodynia. Stomatologiya No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

LEKHTSIYER, L.I. (Khar'kov); VORONYANSKIY, G.S. (Khar'kov); KAPLAN, P.M.
(Khar'kov) SUKHOVIY, F.I. (Khar'kov); DINERSHTEYN, Z.M. (Khar'kov);
SERDYUKOVA, O.A. (Khar'kov)

Clinical, anatomical and physiological peculiarities of epulis.
Proc. of the 3:303-316 '56 (MLRA 10:5)
(GDS--TUMORS)

GRIGOR'YEVA, L.P. (Khar'kov); LEKHTSIYER, L.I. (Khar'kov); MAKSIMENKO,
P.T. (Khar'kov); USTIMENKO, V.L. (Khar'kov)

Compound treatment of paradentosis. Probl.stom. 6:92-98 '62.
(MIRA 16:3)

(GUMS--DISEASES)

ACCESSION NR: AP4019246

S/0056/64/046/002/0764/0768

AUTHORS: Peschanskiy, V. G.; Lekhtsiyer, V. S.

TITLE: Theory of cyclotron resonance in metals

SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 764-768

TOPIC TAGS: cyclotron resonance, Fermi surface, inclined magnetic field, open Fermi surface, anomalous skin effect, surface impedance, magnetic field variation

ABSTRACT: The feasibility of observing cyclotron resonance in an inclined magnetic field, due to the presence of open periodic electron trajectories in momentum space, is discussed on the basis of an analysis of the electrodynamic equations based on the work of M. Ya. Azbel' and E. A. Kaner (ZhETF v. 30, 811, 1956 and 32, 896, 1957). It is shown that the variation of the impedance of a sample with a definite orientation relative to the magnetic field as a function of

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ACCESSION NR: AP4019246

the inverse magnetic field strength exhibits resonance under the conditions of anomalous skin effect. Expressions are derived for real and imaginary parts of the surface impedance and for the ratio of the resonant impedance. "We are grateful to M. Ya. Azbel' for valuable discussions of the results obtained." Orig. art. has: 12 formulas.

ASSOCIATION: Fiziko-tekhnicheskii institut nizkikh temperatur AN UkrSSR (Physicotechnical Institute of Low Temperatures, AN UkrSSR)

SUBMITTED: 27Jul63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: PH

NO REF SOV: 004

OTHER: 002

Card 2/2

NOSKO, G.S., inzh.; LEKHTSIND, A.I., inzh.; SHAPUNOV, M.M., inzh.

The S-445 hydraulic machine tool for cutting reinforcement
steel. Stroi. i dor. mash. 7 no.4:30-32 Ap '62. (MIRA 16:7)

(Metal-cutting tools)
(Concrete reinforcement)

SEKIVANOV, I.I., inzh.; BURGER, A.I., inzh.; IVANOV, A.I., inzh.,
retsenzent; SHOKOV, A.I., inzh., retsenzent; TIMOFEYEV, V.S.,
inzh., nauchnyy red.; LEKHITSIND, A.M., inzh., nauchnyy red.;
KAPLAN, M.Ya., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Building machinery] Stroitel'nye mashiny. Leningrad, Gos.
izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1958.
310 p. (MIRA 12:6)

(Building machinery)

ЛЕКХТТИСИНД, А.М.
KUROCHKINA, Ye.K., inzh.; ЛЕКХТТИСИНД, A.M., inzh.

New machine tools used for mechanizing reinforcement work.
Stroi. i dor. mashinostr. 3 no.2:11-12 F '58. (MIRA 11:2)
(Machine tools)
(Reinforced concrete construction)

~~LEKHTSIND, A.M., inzh.; SHAPIRO, G.I., inzh.~~

The C-349 crushing and sorting unit. Stroi. i dor. mashinstr. 3
no.9:20-22 S '58. (MIRA11:10)
(Crushing machinery)

TIMOFEYEV, V.S., inzh.; LEKHTSIND, A.M., inzh.

New equipment for making reinforced concrete products.
Biul. tekhn. inform. po stroit. 5 no.4:4-8 Ap '59. (MIRA 12:8)
(Conveying machinery) (Concrete slabs)

NOSKO, G.S., inzh.; LEKHTSIND, A.M., inzh.; SHAPUNOV, M.M., inzh.

Hydraulic tool for cutting reinforcing steel. Mekh.stroi.
17 no.8:30-31 Ag '60. (MIRA 13:8)
(Reinforcing bars) (Cutting machines)

SLAVKOVIC, Jovan, Doc.dr; ~~LEKIC~~, Aleksandar, dr; BROIC, Mladen dr.

Sudden death in rheumatic carditis. Srpski arh.celok.lek. 87
no.11:1413-1418 Nov. 54.

1. I Interna klinika Medicinskog fakulteta u Beogradu. Upravnik:
prof. dr Branislav Stanojevic. Institut za patologiju Medicinskog
fakulteta u Beogradu. Upravnik: prof. dr Ksenofon Sahovic.

(DEATH, SUDDEN, in various diseases,

rheum.heart dis.)

(RHEUMATIC HEART DISEASE,

sudden death in)

LEKIC, B.

Cotton in the agriculture of Serbia. p. 54
(GLASNIK, Vol. 4, No. 7/8, July/Aug. 1956 (Published 1957))

SO: Monthly List of East Europeans Accessions (EEAL) LC Vol. 6: No. 12, Dec. 1957
Uncl.

LEKIC, B.

Conditions and possibilities of the production of cotton in Serbia. 545.

(TEKSTIL. Vol. 6, No. 6, June 1957, Zagreb, Yugoslavia)

SD: Monthly List of East European Accessions (EEAL) Lc. vol. 6, No. 10; October 1957. Uncl.

LEKIC, Danilo

"On the Influence of Nuclear Weapons on the Organisation of Armies and Modes of Warfare"

SO: Medjunarodni Problemi (No. 1, 1955)

YUGOSLAVIA / General and Specialized Zoology. Insects P
Pest Insects and Ticks.

Abs Jour : Ref Zhur - Biol., No 17, 1958, No 78302

Author : ~~Lekic, Mladen~~

Inst : Not given

Title : Concerning a Pest of Gardens, the Metallic Wood-
Borer of the Genus Agrilus.

Orig Pub : Zastita Bilja, 1956, 35, 3-22.

Abstract : By investigations made during 1949-50 and 1953-
55 in a few districts of Serbia, it was estab-
lished that A. macroderus, producing consider-
able damage to the fruit-trees, is distributed
in the entire investigated area, and probably in
all of Yugoslavia. The frequency of finding
this pest is determined by climatic and micro-
climatic factors, primarily by the amplitude of

Card 1/2

ZUDIN, V.M.; SAGAYDAK, I.I.; YAKOBSON, A.P.; BABARYKIN, N.N.; DORMAN, V.G.;
GALATONOV, A.L.; LEKIN, P.V.

Preparation of screened sinter and its use in blast furnace
smelting. Stal' 22 no.8:675-679 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Sintering)
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USSR/Farm Animals - Honeybee

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69428

Author : Zhgenti, S.K., Lekishvili, M.A., Lokabidze, I.M.,
Kakabadze, O.Ye.

Inst : Scientific Research Institute of Animal Husbandry of
Georgian SSR

Title : Results of Investigating the Economically Valuable
Properties of Four Basic Populations of Gray High-
Mountain Georgian Honeybees

Orig Pub : Sb. tr. N.-i. in-t zhivotnovodstva. GruzSSR, 1957, 2,
243-257

Abstract : As a result of three-year investigation, it was esta-
blished that the Megrelnskaya honeybee has the longest
ligula (7.02 mm), highest productiveness, is less incli-
ned to swarming, is peaceful, but at the same time is

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LEKISHVILI, Vladimir Illarionovich; MIKELADZE, Aleksandr
Lemenovich; CHANICHVILI, Vladimir Fomich; ARDISHVILI, A.A.,
rel.

[Methods of mining the coal deposits of Georgia] Metody
razrabotki kameonougol'nykh mestorozhdenii Gruzii. Tbilisi,
Metsniereba, 1955. 160 p. (MIRA 18:11)

LEKISHVILI, V. P.

Dissertation: "The Effect of Functional Disruption of Higher Nervous Activity on the Heart." Cand Med Sci, Inst of Physiology imeni I. P. Pavlov, Acad Sci USSR, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec. 1954

LEXISHVILI, V.P. (Leningrad).

Critique of psychosomatic medicine. Klin.med. 31 no.9:5-13 S '53.
(MLRA 6:11)

1. Institut fiziologii im. I.P.Pavlova Akademii nauk SSSR.
(Medicine, Psychosomatic)

LEKISHVILI, V.P.

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Effect of interference of digestive and defense reflexes on the heart. Trudy Inst. fiziol. 3:303-315 '54. (MIRA 8:2)

1. Laboratoriya kortiko-vistseral'noy patologii. Zaveduiushchiy I.T.Kurtsin.

(HEART, physiology,
eff.of conditioned reflex disord. in cats)
(REFLEX, CONDITIONED,
disord., eff. on heart cats)

LEKISHVILI, V.P.

Cardiac component of the conditioned food reflex. Zhur.vys.nerv.deiat.
6 no.6:822-829 N-D '56. (MLRA 10:2)

1. Laboratoriya kortiko-vistseral'noy patologii Instituta fiziologii
imeni I.P.Pavlova Akademii nauk SSSR.

(REFLEX, CONDITIONED

cardiac component in food reflex in dogs)

(HEART, physiol.

same)

LEKISHVILI, V.P.

Changes in the higher nervous activity and in cardiac function following the conversion of a conditioned food reflex into a defense response to electric stimulation. Trudy Inst. fiziol. 6:299-309 '57. (MIRA 11:4)

1. Laboratoriya kortiko-vistseral'noy patologii (zaveduyushchiy I.T. Kurtsin).

(CONDITIONED RESPONSE) (HEART)

USSR / General Problems of Pathology. Tumors. Nervous System. U

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102566.

Author : Eristavi, K.D.; Georgadze, G.Ye.; Lekishvili, V.P.
Inst : AS Georgian SSR
Title : The Influence of Bromide and Caffeine on the Induction of Tumors in Transcaucasian Hamsters.

Orig Pub: Soobshch. AN GruzSSR, 1957, 18, No 2, 233-236.

Abstract: With food, hamsters (H) were given caffeine (0.1 g each in the course of 20 days and later every other day) or bromide (0.1 g each in the course of 20 days and after 5-day intervals 0.5 g each). Simultaneously, the skin of the interscapular region was lubricated with a 0.01% solution of 9,10-dimethyl-1,2-benzanthracene in benzole. After 50 applications, the animals were subjected to biopsy

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